

AMENDMENTS TO THE CLAIMS

Cancel claims 1-20 and add new claims 21-41 as shown below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-20. (Canceled)

21. (New) An apparatus for an amputee who has a residual limb, comprising:

a flexible liner adapted to cover a portion of the residual limb;

only a single socket, wherein the socket has a cavity to receive the liner and residual limb such that there is a space between the socket and the liner when received in the cavity; and

a vacuum source in fluid communication with the space between the liner and the residual limb when the liner and residual limb are received in the cavity;

wherein the apparatus includes no tubing for insertion between the liner and the residual limb for removing air at an interface between the liner and the residual limb.

22. (New) The apparatus of claim 21, wherein the socket is substantially rigid.

23. (New) The apparatus of claim 21, wherein the socket has a limb opening through which the residual limb may pass and has a vacuum opening through which the vacuum source and the cavity fluidly communicate.

24. (New) The apparatus of claim 21, further comprising a vacuum valve between the vacuum source and the cavity.

25. (New) The apparatus of claim 24, wherein the vacuum valve is connected to the socket.
26. (New) The apparatus of claim 21, wherein the vacuum source is configured to evacuate air from the cavity to draw the limb toward the socket.
27. (New) The apparatus of claim 21, wherein the vacuum source comprises a mechanical pump.
28. (New) The apparatus of claims 21, wherein the vacuum source comprises a motor-driven pump.
29. (New) The apparatus of claim 28, further comprising a power source, wherein power source is connected to the motor-driven pump.
30. (New) The apparatus of claim 29, wherein the power source comprises a battery.
31. (New) The apparatus of claim 21, further comprising a regulator for controlling the vacuum source.
32. (New) The apparatus of claim 29, further comprising a regulator connected to the power source for controlling the vacuum source.
33. (New) The apparatus of claim 21, further comprising a prosthetic limb member that includes one of a portion of a prosthetic leg or prosthetic arm, wherein the prosthetic limb member is connected to the socket.
34. (New) The apparatus of claim 21, further comprising a seal member adapted to be between the socket and the residual limb to reduce air leakage into the space.
35. (New) An apparatus for an amputee who has a residual limb comprising:
a flexible liner adapted to cover a portion of the residual limb;

only a single socket, wherein the socket has a cavity to receive the liner and residual limb;

a motor-driven vacuum pump in fluid communication with the space when the liner and residual limb are received in the cavity; and

a battery for powering the motor-driven vacuum pump;

wherein the apparatus includes no tubing for insertion between the liner and the residual limb for removing air at an interface between the liner and the residual limb.

36. (New) A method for securing a portion of the residual limb of an amputee to a prosthesis, comprising the steps of:

providing only a single prosthetic socket having a cavity, a flexible liner, and a vacuum source;

inserting a portion of a residual limb the flexible liner and into the cavity of the socket;

removing air between the residual limb and the socket using the vacuum source to force the residual limb and the socket together; and

not inserting tubing between the residual limb and the flexible liner to remove air at an interface between the residual limb and the flexible liner.

37. (New) The method of claim 36, further comprising the steps of controlling the vacuum source to continue to force the residual limb and socket together.

38. (New) The method of claim 36, wherein the vacuum source comprises a motor-driven pump powered by the battery.